

Application No.: 10/024311

Case No.: 56695US002

**REMARKS**

The Examiner has again rejected claims 1 and 6-12 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Serra et al. (US 5,407,726). The Examiner has stated "Serra et al. disclose adhesive tapes comprising polymeric backing layer and a pressure sensitive adhesive layer (abstract). A reinforcing scrim may be used in the adhesive tape. The backing layer comprises polyethylen (col 2, ln 26-32), which is the same type of backing layer used by Applicant (page 3, line 19 of the present specification). A nonwoven scrim may be incorporated into the tape to enhance tearability and strength and can comprise either polyester or cotton (col 3, ln 19-47). A portion of the adhesive layer will be present in the interstices of the scrim (col 3, ln 27-29)."

The Examiner suggests that "Serra et al disclose the claimed invention except for the teaching that the index of refraction of the material of the fibers is within plus or minus 0.2 of the index of refraction of the adhesive and the percentage of light reflected from the tape as diffuse light was at least 15% before the tape was adhered to a substrate and was reduced by at least 10% or 60% by adhering the tape to the substrate."

The Examiner further suggests that "Although Serra et al. do not explicitly teach the claimed index refraction of the fibers and adhesive or the percentage of reflected light before and after adhering the tape to a substrate, it is reasonable to presume that these properties is inherent to the Serra et al. invention. Support for said presumption is found in the use of like materials (i.e. polyester or cotton nonwoven scrims, polyethylene backing layers, and adhesive layers). The burden is upon Applicant to provide otherwise. *In re Fitzgerald*, 205 USPQ 594."

The holding in *In re Fitzgerald*, 205 USPQ 594 (*Fitzgerald*) is not applicable because the claims in the subject application are not product by process claims. *Fitzgerald* related to product by process claims, and it was stated that the "Rejection under 35 U.S.C. 103 is indicated where prior art discloses product that appears to be either identical with or only slightly different from product claimed in product-by-process claim: Patent Office can require applicant to prove that prior art products do not necessarily or inherently possess characteristics of his claimed product; whether rejection is based on "inherency" under 35 U.S.C. 102, on "prima facie obviousness" under 35

Application No.: 10/024311

Case No.: 56695US002

U.S.C.103 jointly or alternatively, burden of proof is same: Patent Office that has reason to believe that functional limitation asserted to be critical for establishing novelty in claimed subject matter may, in fact, be inherent characteristic of prior art possesses authority to require applicant to prove that subject matter shown to be in prior art does not possess characteristic relied on." Applicant was required to prove that under normal operating conditions a process described in a prior art "Barnes" reference did not produce a degree of crystallization shrinkage claimed by Fitzgerald.

The claims in the subject application are not product by process claims. Rather they are article claims that recite a combination of structural elements with features that cooperate to provide a novel reinforced tape.

In the reinforced tape according to the present invention as claimed in claim 1, both the backing layer and the layer of adhesive are visually transparent, only portions of the reinforcing scrim are wetted by the adhesive so that the reinforcing scrim is visible along the backing layer, and the polymeric fibers and the transparent adhesive have similar indexes of refraction so that upon applying force to the backing to press the layer of adhesive against a substrate the layer of adhesive will wet the fibers, causing the reinforcing scrim to become significantly less visible than before the reinforced tape was adhered to the substrate.

Applicant has no burden as a result of *In re Fitzgerald* of proving that these features in article claims are not inherent in the structures described by Serra et al, but must only establish that the claimed combination of features is not anticipated by or made obvious by the description in Serra et al under 35 U.S.C. 102 or 35 U.S.C. 103.

Serra et al describes a reinforced tape that, like the tape according to the present invention as claimed in claim 1, comprises a backing layer of polymeric material, a reinforcing scrim formed of fibers, and a layer of adhesive along a major surface of the backing layer covering the reinforcing scrim.

Serra et al state that the backing layer for their tape is of a chlorinated polymeric material (col 2, ln 16-17) that preferably consists of chlorine in chlorinated polyethylene and polyethylene in a chlorinated polyethylene and polyethylene blend (col 2, ln 27-32), and can further include a heat stabilizer such as barium-cadmium, lead or others, antioxidants, and colorants such as carbon black, etc. (col 2, ln 32 - 40); and that the layer of adhesive for their tape can be of acrylics and rubber-

Application No.: 10/024311

Case No.: 56695US002

based adhesive of per se known description, e.g., a natural or synthetic rubber elastomer. A typical adhesive of this description may include a blend of natural rubber, tackifier, and other reagents performing specific desired functions (col 2, ln 41-46). While these lists of possible materials for the backing layer and layer of adhesive of the tape described by Serra et al include some materials from which those layers could be made to make those layers visually transparent, they also include materials that when included in a backing layer or layer of adhesive would normally not make those layers visually transparent (e.g., backing layers including lead or carbon black, and adhesive layers comprising natural rubber). Serra et al do not teach or suggest that both, or even either one of their backing layer and their layer of adhesive should be visually transparent.

Serra et al describe applying the layer of the adhesive to the scrim and backing layer by "known coating techniques, e.g., calendaring, casting, or extrusion" (col 3, ln 65 - 68) without any specificity as to how thoroughly the adhesive should be pressed into engagement with the scrim and backing except to state (as noted by the Examiner) that "A portion of the adhesive layer will be present in the interstices of the scrim" (col 3, ln 27-29). This quotation may suggest that all rather than only a portion of the reinforcing scrim will be wetted by the adhesive when the tape is made. In any event, Serra et al provide no teaching to provide a tape in which only portions of a reinforcing scrim are wetted by an adhesive covering the reinforcing scrim. We do not understand the Examiner's response to this argument that "This argument is not persuasive because if the adhesive is present at the interstices of the scrim only then a portion of the scrim is being wetted by the adhesive." The statement in Serra et al that "A portion of the adhesive layer will be present in the interstices of the scrim" does not define how much of the scrim is wetted by the adhesive, and does not teach or make obvious the condition claimed in claim 1 that only portions of the reinforcing scrim are wetted by the adhesive so that the reinforcing scrim is visible along the backing layer.

Serra et al state that their scrim can be formed of synthetic fibers such as polyester or of polyester and cotton (col 3, ln 19 - 55). While there may be adhesives among those suggested by Serra et al that have indexes of refraction that are similar to such fibers, there may also be adhesives that do not.

Application No.: 10/024311

Case No.: 56695US002

Thus, the structural features of the reinforced tape claimed in claim 1 (i.e., a tape (1) in which both the backing layer and the layer of adhesive are visually transparent, (2) in which only portions of the reinforcing scrim are wetted by the adhesive so that the reinforcing scrim is visible along the backing layer, and (3) in which the polymeric fibers and the transparent adhesive have similar indexes of refraction so that upon applying force to the backing to press the layer of adhesive against a substrate the layer of adhesive will wet the fibers, causing the reinforcing scrim to become significantly less visible than before the reinforced tape was adhered to the substrate) are certainly not necessarily present in the tape described by Serra et al. There is no teaching or suggestion in Serra et al that would anticipate or make this combination obvious.

Also, the tape structure claimed in the subject application is not inherent in the structures described by Serra et al. under the guide lines set forth in the M.P.E.P. in section 2112, page 51, under the heading "EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING TO SHOW INHERENCY" wherein it states:

"The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)."

Application No.: 10/024311

Case No.: 56695US002

Claim 1 should be allowed.

Claims 2 through 12 are dependent on claim 1 and thus should be allowed for all of the reasons given above with respect to claim 1. Additionally, claims 2 through 12 recite further structural features that are not taught or suggested in the claimed combination by Serra et al or by a combination of Serra et al and Perez et al. For example, claim 6 recites that the index of refraction of the material of the fibers is within plus or minus 0.2 of the index of refraction of the adhesive; Claim 11 recites that when tested in accordance with the test described in this application, the percentage of light reflected from the claimed tape as diffuse light was at least 15% before the tape was adhered to a substrate, and was reduced by at least 10% by adhering the tape to a substrate; and claim 12 recites that when tested in accordance with the test described in this application, the percentage of light reflected from the tape as diffuse light was at least 15% before the tape was adhered to a substrate, and was reduced by at least 60% by adhering the tape to a substrate.

Reconsideration in view of these remarks and allowance of all of the claims now in this application are respectfully requested.

Respectfully submitted,

June 23, 2004  
Date

By: W<sup>c</sup> L. Huebsch  
William L. Huebsch, Reg. No.: 25,990  
Telephone No.: (651) 733-2835

Office of Intellectual Property Counsel  
3M Innovative Properties Company  
Facsimile No.: 651-736-3833